ADRENAL CYSTS

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ABSTRACT

This work discusses the adrenal cysts, mainly the pseudo-cysts which are very rare and usually discovered incidently during imaging findings as the majority are asymptomatic. All cases recorded in the literature are diagnosed by the computerized tomography before sugery. This case was diagnosed only after surgical removal and histopathological examination.

CASE HISTORY :

A female patient of forty years old, pregnant for 18 weeks reffered by her doctor to the ALAMAL special hospital for ultrasonographic assessment of pregnancy. The Ultrasonography (1) revealed, in addition to the graved uterus, a big echoluscent structure measuring about 15x13 cm, rounded with smooth wall between the upper pole of the right kidney and the inferior surface of the liver with the possipility of either a Hydated cyst in the inferior surface of the liver, a cyst in the upper pole of the kidney or a cyst in the right supra renal gland. So, C.T. Scan was recommended for differentiation but was not done because of pregnancy .

The only clinical manifestation was an attack of sudden syncope for few minutes the day before presentation with no manifestations of hormonal distrubances.

Exploration was done through a right upper para-median incision. A cystic swelling was found occupying the hepatorenal pouch retroperitoneally. The swelling was not attached to the liver or any surrounding structure but only indenting the upper pole of the right kidney, so that the lower pole is elevated like taht of a boat and deviated medialy. The swelling was passing upward and medialy in close relation to the lower dossol vertebra and inferior vena cavo and

was lying on the diaphragmatic surface of the lower ribs.

The swelling had been enucleated by fingers only through a small icision in the peritoneum on its anterior surface, being close to the wall of the cyst throughout the process of enucleation. The enucleation of the upper medial pole which represente the apex of the pear-shaped swellong was some what difficult but successfully enucleated without rupture. On histopathological examination, it was a non-functining.

Pseudcyst of the advenal cortex. It is an oval cyst measuring 18x12 cm in diameter the outer surface is smooth. It contains a serosanguinous fluid and blood clots. The wall is thin. The internal wall is smooth and appears yelowish in coloure. It is lined by blood clots. (2)

DISCUSSION

Rosai J. (1981) (3) said that cysts arising in the adrenal glands may be clinically confused with a retroperitoneal neoplasm due to their occasionally large size (up to 30 cm) and sometimes bilateral.

Rosai J. also assumed that massive haemorrhage and cystic degeneration of a primary neoplasm are considered the two most likely explanations of adrenal cysts.

Sommer's (4) (1977) and solverbug (5) classififed adrenal cysts into three types according to the lining membrane :

(a) Echinococcus cysts (0.5%) being rare.

(b) Genuine cysts which are lined by glandular epithelium or endothelium indicating a cavernous lymphangioma or haemangioma.

(c) Pseudocyst lined by fibrous tissue represent residues of remote hematomas or degenerated adenomas. Solverburg (5) said that most operative cases have been clessfied as haemorrhagic pseudo cysts and nearly alwyas present as a space occupying mas casuing flank discomfort and downward displacement of the kidney.

Reviewing the literatures we found 98 works on cysts and neoplasms of the adrenal glands. Most of these works declare the fact that adrenal cysts and neoplasms mostly discoverd incidentally either by ultrasound or computerized tomography or intravenous pyelography.

One of the works in Department of Surgery, Singapore General Hospital (1990) (6) recorded a case of asymptomatic, benign non-functioning adrenal cyst of the left adrenal gland detected on an abdominal ultrasound for the investigation of jaundice and confirmed by C.T. Scan. The same work declared also the fact that only about 300 cases of adrenal cysts have been reported throughout the worlds. Salverburg (5) record that only about 250 have been reported.

Another work which gave a support to the sommer's assumption that haemorrhage may be the explanation of the pseudocystic afrenal swellings done by the department of pathology, University of virginia. (7). In this work a clinicopathologic and immunohistochemical study of three endothelial and five haemorrhagic cycts (pseudocysts) which arose in 7 patients aged 23-73 years. Three of the haemorrhagic cysts stained strongly for factor VIII related antigen (F. VIII R. Ag.) and collagen type IV. (C.IV) in irregular vascular channels of the attenuated cortex and within the cyst contents. These channels suggest that at least some haemorrhagic cysts arise when haemorrhage occurs in a pre-existing blood vascular anomaly.

In this study the cyst was also detected incidentally by ultrasound and no other investigation could be done because of pregnancy. The case was diagnosed only after enucleation and histopathology.

The five haemorrhagic pseudocysts of the pathological department in the University of Virginia were sphirical firm masses containing clotted blood and-hyaliniaed thrombus with attenuated adrenal cortex in the outer fibrous wall. Islands of intact cortical cells were present deeply within the thrombi of few haemorrhagic cysts.

The wall of the syst in the present study was formed of dense fibrous tissue with no epithelial lining and lined by fibrin deposits only. The wall contains remnants of compressed adrenal cotical tissue. No evidence of infection or neoplasia (2). It seems possible that htis case has the same histopathology of the ifve haemorrhagic pseudocysts of the previous virginia work with late discovery in our case as denoted by the large size of the cyst.

Explorat and removal of a cyst of 18x12 cm. was essential otherwise if this female patient is left she will be liable to complications after being full term as rupture of the cyst with termination of pregnancy.

The patient delivered nromally and no hormonal disturbances and the patient suffering only tachycardia which was controlled by indral for 10 days.

It could be concluded that haemorrhage may be the underlying cause of adrenal pseudocyst proving the old assumption on 1977 given by Sommer's C. and this confirms with virginia study.

This case is the second after the three hundred cases previously recorded allover the world.

Still surgical exploration is to be considered best in reaching the proper diagnosis and treatment.

Sedden, J.M., University School of Medicine, West Virginia in 1985 (8) said, "In view of the questionable accuracy of radiologic diagnosis of adrenal masses and the well-documented difficulty in differentiating adrenal adenomas from carcinomas on histologic grounds, consideration should be given to the surgical exploration and excision of all adrenal masses discovered incidentally.

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حويصلات الغدة فوق الكلوية

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هذا البحث يتناول أكياس الغدة الكظرية وبالتخصيص الأكياس الكاذبة وهى نادرة جدا وهذه الأكياس تكتشف عادة مصادفة أثناء التصوير الأشعاعى أو الموجات الصوتية لأغراض أخرى مثل أمراض الكلى حيث لاتظهر على المريض أعراض فى معظم هذه الحالات .

جميع الحالات التى نشرت حتى نهاية عام ١٩٩٠ تم تشخيصها بالأشعة المقطعية قبل العملية الجراحية لاستئصال الورم . هذه الحالة تم تشخيصها بعد العملية الجراحية وإزالة الورم البالغ حجمه ١٨ × ١٢ سم وعمل تحليل أنسجة حيث أن المريضة كانت حامل فى الشهر الرابع ولايجب تعريضها للأشعاعات وكان قد تم أكتشاف الكيس بالموجات فوق صوتية لمتابعة الحمل . وحتى يوليو عام ١٩٩٠ بلغ عدد هذه الأكياس ثلاثمائة كيس والسبب الراجح لهذه الأكياس هو حدوث تحلل فى جلطة دموية سابقة بالغدة فوق الكظرية .